



FortiSwitch Cloud Administration Guide

Version 1.1.1

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FortiSwitch Cloud Administration Guide

July 23, 2018

11-111-495550-20180723

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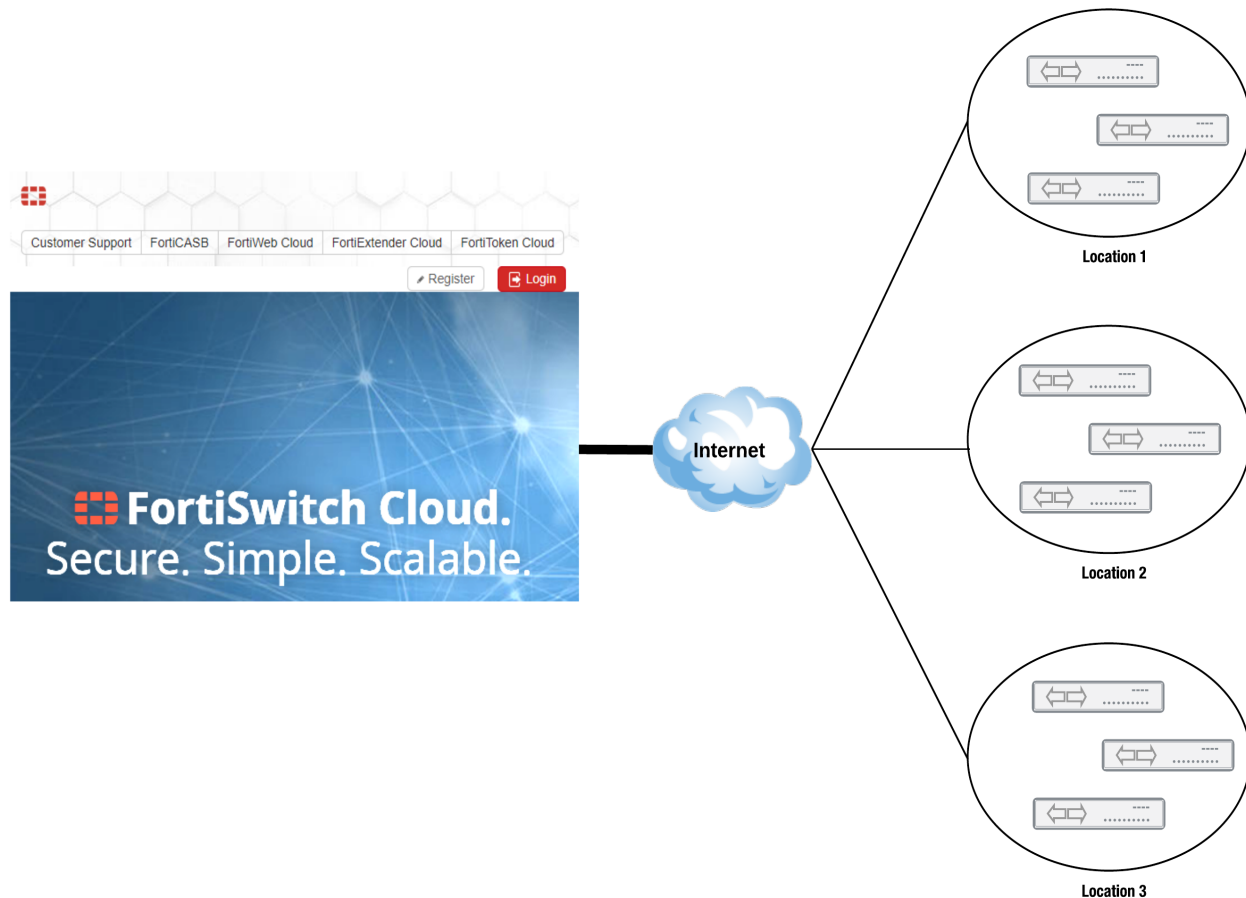
Change log

Date	Change Description
July 23, 2018	Initial release for 1.1.1

Introduction

FortiSwitch Cloud provides management as a service (MaaS) for secure switching infrastructure deployed with FortiSwitch devices. It provides a centralized discovery, visibility, and configuration management solution without the need of on-premise hardware, software, or management overhead.

FortiSwitch Cloud manages FortiSwitch devices in standalone mode.



Services available

- Dynamic discovery of a device
- Account dashboard
 - Quick snapshot of online devices and PoE power
 - Bandwidth usage
 - Critical events
- Multi-user support for an account

- List and detail view of all devices added on the account
- Device-level interface with global view
- Connect to a device (CLI or GUI) individually from portal
- Upgrade device software
- Back up, modify, and restore device configuration
- Check the status of each FortiSwitch unit (online or offline)
- Check the port configuration for all FortiSwitch units
- Decrease debugging time if you need assistance from FortiCare Support Services
- Topology display
- Port administration-status configuration
- PoE configuration
- Switch interface list
- Trunk (LAG) configuration
- VLAN assignment to ports
- List of MAC addresses configured for each FortiSwitch unit
- System and audit logs
- Zero-touch configuration

Supported models

FortiSwitch Cloud supports all FortiSwitch units running FortiSwitchOS Release 6.0.0 or later.

What's new in FortiSwitch Cloud version 1.1.1

The following is a list of new features and enhancements in FortiSwitch Cloud version 1.1.1:

- Support Security Assertion Markup Language (SAML) single sign-on (SSO) in FortiCare

How this guide is organized

This guide is organized into the following chapters:

- [How to get started](#) describes what to do to use FortiSwitch Cloud. See [How to get started on page 9](#).
- [Dashboard](#) describes how to use the Dashboard page to see a snapshot of FortiSwitch activity that occurred in the last 24 hours. See [Dashboard on page 14](#).
- [Switch](#) describes how to use the Switch page to manage the FortiSwitch configuration and to view the switch topology. See [Switch on page 16](#).
- [Configuration](#) describes how to use the Configuration page to configure switches and interfaces and to create, edit, and delete trunks. See [Configuration on page 22](#).
- [Monitor](#) describes how to use the Monitor page to check MAC addresses, the system log, or the audit log. See [Monitor on page 39](#).

- [My Account](#) describes how to use the My Account page to add, edit, and remove user accounts and to check your Cloud Management license. See [My Account on page 42](#).

How to get started

NOTE: The following are the requirements to use all of the features of FortiSwitch Cloud:

- Register your FortiSwitch units with Fortinet Support (<https://support.fortinet.com>).
- Check that your FortiSwitch units are running FortiSwitchOS 6.0.0 or later.
- Check that your FortiSwitch units are connected to the Internet.
- Subscribe to FortiCare (<https://www.fortinet.com/support-and-training/support-services/forticare-support.html>).
- Find the cloud key assigned to each FortiSwitch unit. If you already own FortiSwitch units or receive FortiSwitch units that do not have a cloud key on a unit, contact your Fortinet partner or reseller for the unique cloud key assigned to each FortiSwitch serial number.
- Purchase a FortiSwitch Cloud Management License through authorized Fortinet resellers and distributors if you want to manage more than three FortiSwitch units. Using FortiSwitch Cloud is free for the first three registered FortiSwitch units. If you manage more than three registered FortiSwitch units without a FortiSwitch Cloud Management License, the additional FortiSwitch units will have reduced functionality in FortiSwitch Cloud after a grace period.
- Set your FortiSwitch units to the standalone mode.
- Check that the system time on your FortiSwitch units is accurate. To set your the time on your FortiSwitch unit, see the *FortiSwitchOS Administration Guide—Standalone Mode*.

To get started using FortiSwitch Cloud, follow these procedures:

1. [Using the correct switch management mode for cloud management on page 9](#)
2. [Enabling and disabling cloud management on page 11](#)
3. [Logging in to FortiSwitch Cloud on page 11](#)
4. [Adding your FortiSwitch units to FortiSwitch Cloud on page 12](#)

Using the correct switch management mode for cloud management

To manage a FortiSwitch unit from FortiSwitch Cloud, make certain that the switch management mode is set to `local` using the following commands on your FortiSwitch unit:

```
config system global
    set switch-mgmt-mode local
end
```

If your FortiSwitch unit is in FortiLink mode, you need to change your switch management mode to local and also run the following command on your FortiGate unit:

```
execute switch-controller set-standalone <switch-id>
```

This command returns the FortiSwitch unit to the factory defaults, reboots the FortiSwitch unit, and prevents the FortiGate unit from automatically detecting and authorizing the FortiSwitch unit.

Checking your FortiSwitch Cloud configuration

To check your FortiSwitch Cloud configuration, use the following commands:

```
S524DF4K15000024 # config system fsw-cloud
S524DF4K15000024 (fsw-cloud) # get

interval          : 15
name              : fortiswitch-dispatch.forticloud.com
port              : 443
status            : enable
```

Option	Description
interval	The time in seconds allowed for domain name system (DNS) resolution. The default is 15 seconds. The range of values is 3-300 seconds.
name	The domain name for FortiSwitch Cloud. By default, this field is set to <code>fortiswitch-dispatch.forticloud.com</code> .
port	Port number used to connect to FortiSwitch Cloud. The default is port 443.
status	Whether access to FortiSwitch Cloud is enabled or disabled. By default, the status is set to <code>enable</code> .

To check your connections to FortiSwitch Cloud, use the `get system fsw-cloud-mgr connection-info` command.

The State-Machine field is set to `FSMGR_STATE_READY` when your FortiSwitch unit is being managed by FortiSwitch Cloud. The SSL tunnel is the secure communication channel between your FortiSwitch unit and FortiSwitch Cloud. FortiSwitch Cloud uses the Socket Secure protocol (SOCKS) to communicate with your FortiSwitch units.

For example:

```
S524DF4K15000024 # get system fsw-cloud-mgr connection-info

User Account-ID:      : 012345
Dispatch Service      : IP= xx.xx.xx.xx
Access Service        : IP= xx.xx.xx.xx, Port= 443, Connected on: 2017-12-20
13:54:40
State-Machine         : State= FSMGR_STATE_READY, Event= EV_READY_HBEAT_GOOD

Bootstrap Service     : hostname= xxxxxxxxxxxx, Port= 8000
Bootstrap State       : State= OK, api-ver= v1

SSL Local End-Point   : Interface: mgmt, IP: xx.xx.xx.xx
SSL verify Code       : ok
SSL Tunnel Uptime     : Days: 0  Hours: 2  Mins: 22
SSL Tunnel stats      : restart-count= 4, Reason= Configuration Change

Stats:
=====
Switch  Keep Alive  Tx/Reply := 45 / 45
```

```

Manager Keep Alive Rx/Error := 45 / 0

Socks Req Rx/Last Stream-ID := 224 / 14
Reset Req Rx/last Stream-ID := 8 / 12
Goaway Req Rx := 0
Unknown Req Rx := 0

```

```
Syslog FD/Tx/Err := 8 / 3 / 0
```

```
Used SOCKS stream-id:
```

```
=====
```

SID	SockFd	State	Description
18	10	DATA	REST REQ
5	0	DATA	SYSLOG DATA

Enabling and disabling cloud management

To allow your FortiSwitch unit to be managed by FortiSwitch Cloud, use the following commands:

```

config system fsw-cloud
    set status enable
end

```

If you want to remove a FortiSwitch unit from FortiSwitch Cloud, use the following commands:

```

config system fsw-cloud
    set status disable
end

```

Logging in to FortiSwitch Cloud

You do not need to create a separate account for FortiSwitch Cloud. You can use your FortiCare account to log in.

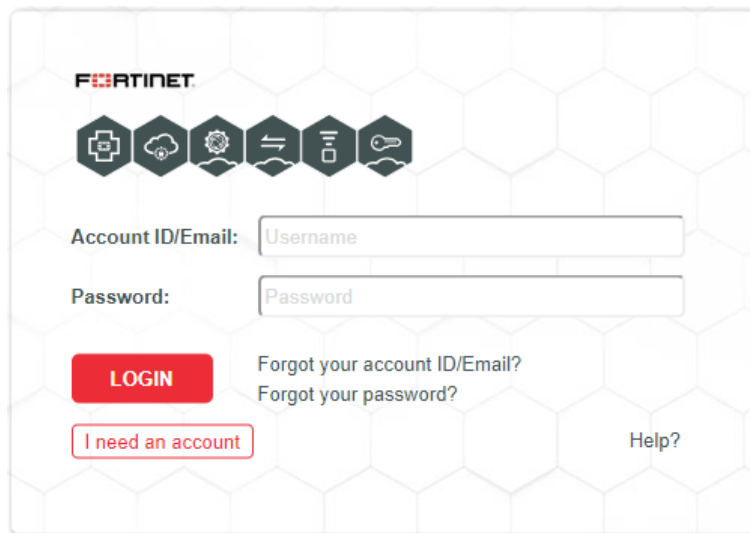
NOTE: You cannot use an existing FortiCloud account for FortiSwitch Cloud.

To log in to FortiSwitch Cloud:

1. Go to <https://fortiswitch.forticloud.com>.



2. Select *Login*.

The image shows the login form on the FortiSwitch Cloud website. The form has a white background with a hexagonal pattern. At the top is the Fortinet logo and a row of six icons representing different Fortinet products. Below the icons are two input fields: 'Account ID/Email:' with a placeholder 'Username' and 'Password:' with a placeholder 'Password'. To the left of the password field is a red 'LOGIN' button. To the right of the password field are two links: 'Forgot your account ID/Email?' and 'Forgot your password?'. Below the 'LOGIN' button is a link 'I need an account'. To the right of the 'Forgot your password?' link is a link 'Help?'.

3. Enter your account identifier or email address and enter your password.
4. Select *LOGIN*.

Adding your FortiSwitch units to FortiSwitch Cloud

You need a cloud key to add your FortiSwitch unit to FortiSwitch Cloud. New FortiSwitch units will have pre-assigned cloud keys. If you already own FortiSwitch units or receive FortiSwitch units that do not have a cloud key on a unit, contact your Fortinet partner or reseller for the unique cloud key assigned to each FortiSwitch serial number.

After you have logged in to FortiSwitch Cloud, you need to add each FortiSwitch unit to FortiSwitch Cloud. If you have a bulk key, you can add multiple FortiSwitch units to FortiSwitch Cloud at the same time.

To add FortiSwitch units to FortiSwitch Cloud:

1. Go to *Switch > Switches* and select *Add Switch*.



2. To add one FortiSwitch unit, select *Regular Key*. To add multiple FortiSwitch units, select *Bulk Key*.

Add switch Close

☒ Regular Key ☐ Bulk Key

Please input cloud key to the switch/switches you want to add.

Save

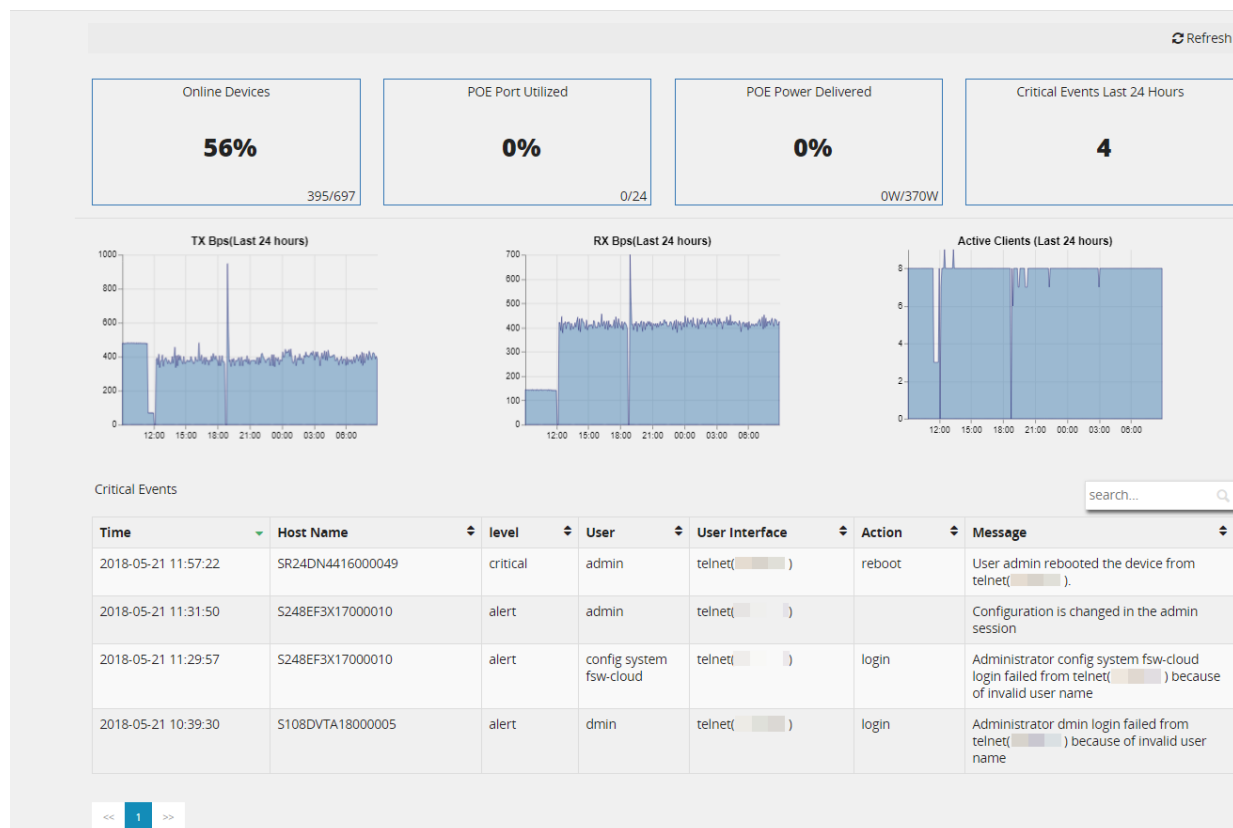
3. Enter the cloud key or bulk key and select *Save*.
The Switches pane lists all managed FortiSwitch units.

Switch / Switches									
search...								+ Add Switch	Refresh
Serial Number	Host Name	Model	IP Address	Version	Connect Time	Status	Action		
S108DVTA18000005	S108DVTA18000005	FortiSwitch-108D-VM		v6.0.0,build0019,180504 (Interim)	05/21/2018 18:50:51	●	x		
S108DVTA18000004	S108DVTA18000004	FortiSwitch-108D-VM		v6.0.0,build0019,180504 (Interim)	05/21/2018 18:51:25	●	x		
S108DVTA18000009	S108DVTA18000009	FortiSwitch-108D-VM		v6.0.0,build0019,180504 (Interim)	05/21/2018 18:52:02	●	x		
S108DVTA18000006	S108DVTA18000006	FortiSwitch-108D-VM		v6.0.0,build0019,180504 (Interim)	05/21/2018 18:51:40	●	x		
S108DVTA18000001	S108DVTA18000001	FortiSwitch-108D-VM		v6.0.0,build0019,180504 (Interim)	05/21/2018 18:51:46	●	x		
S108DVTA18000007	S108DVTA18000007	FortiSwitch-108D-VM		v6.0.0,build0019,180504 (Interim)	05/21/2018 18:52:19	●	x		
S108DVTA18000011	S108DVTA18000011	FortiSwitch-108D-VM		v6.0.0,build0019,180504 (Interim)	05/21/2018 18:51:17	●	x		
S108DVTA18000010	S108DVTA18000010	FortiSwitch-108D-VM		v6.0.0,build0019,180504 (Interim)	05/21/2018 18:50:57	●	x		
S108DVTA18000002	S108DVTA18000002	FortiSwitch-108D-VM		v6.0.0,build0019,180504 (Interim)	05/21/2018 18:51:08	●	x		
S108DV3A17000013	S108DV3A17000013	FortiSwitch-108D-VM		v3.6.0,build4253,171011 (Interim)	05/21/2018 18:51:31	●	x		

<< 1 2 3 4 5 6 7 8 9 10 ... >>

Dashboard

Select **Dashboard** to see a snapshot of FortiSwitch activity that occurred in the last 24 hours:



The Dashboard page provides the following statistics:

- The number and percentage of managed devices that are online
- The number and percentage of Power over Ethernet (PoE) ports that are being used
- The number of Watts and the percentage of PoE power delivered
- The number of critical events in the last 24 hours


The graphs on the Dashboard page show the following:

- How many bits per second were transmitted in the last 24 hours
- How many bits per second were received in the last 24 hours
- The number of active clients in the last 24 hours

Select **Refresh** to update the statistics and graphs.

On the Dashboard page, you can focus on the critical events for specific devices by entering part or all of a host name in the Search field.

Critical Events

search...

Time	Host Name	level	User	User Interface	Action	Message
------	-----------	-------	------	----------------	--------	---------

Switch

Select *Switch* to manage the FortiSwitch configuration and to view the switch topology. Use the left pane for navigation:

Switches	Switch / Switches		
Topology	<input type="text" value="search..."/>		
	Serial Number ⬆	Host Name ⬆	Model ⬆
	S108DVTA18000005	S108DVTA18000005	FortiSwitch-108D-VM
	S108DVTA18000004	S108DVTA18000004	FortiSwitch-108D-VM
	S108DVTA18000009	S108DVTA18000009	FortiSwitch-108D-VM

You can select the following options from the left pane:



















































- [Switches](#)
- [Topology](#)

Switches

The Switches pane lists the FortiSwitch units managed by FortiSwitch Cloud and gives the serial number, host name, model, IP address, firmware version, connection time, and status of each FortiSwitch unit.

Switch / Switches

search... + Add Switch ↻ Refresh

Serial Number	Host Name	Model	IP Address	Version	Connect Time	Status	Action
S108DVTA18000005	S108DVTA18000005	FortiSwitch-108D-VM		v6.0.0,build0019,180504 (Interim)	05/21/2018 18:50:51	●	✕     
S108DVTA18000004	S108DVTA18000004	FortiSwitch-108D-VM		v6.0.0,build0019,180504 (Interim)	05/21/2018 18:51:25	●	✕     
S108DVTA18000009	S108DVTA18000009	FortiSwitch-108D-VM		v6.0.0,build0019,180504 (Interim)	05/21/2018 18:52:02	●	✕     
S108DVTA18000006	S108DVTA18000006	FortiSwitch-108D-VM		v6.0.0,build0019,180504 (Interim)	05/21/2018 18:51:40	●	✕     
S108DVTA18000001	S108DVTA18000001	FortiSwitch-108D-VM		v6.0.0,build0019,180504 (Interim)	05/21/2018 18:51:46	●	✕     
S108DVTA18000007	S108DVTA18000007	FortiSwitch-108D-VM		v6.0.0,build0019,180504 (Interim)	05/21/2018 18:52:19	●	✕     
S108DVTA18000011	S108DVTA18000011	FortiSwitch-108D-VM		v6.0.0,build0019,180504 (Interim)	05/21/2018 18:51:17	●	✕     
S108DVTA18000010	S108DVTA18000010	FortiSwitch-108D-VM		v6.0.0,build0019,180504 (Interim)	05/21/2018 18:50:57	●	✕     
S108DVTA18000002	S108DVTA18000002	FortiSwitch-108D-VM		v6.0.0,build0019,180504 (Interim)	05/21/2018 18:51:08	●	✕     
S108DV3A17000013	S108DV3A17000013	FortiSwitch-108D-VM		v3.6.0,build4253,171011 (Interim)	05/21/2018 18:51:31	●	✕     

<< 1 2 3 4 5 6 7 8 9 10 ... >>

To update the FortiSwitch list, select **Refresh**.

To find a specific FortiSwitch unit, enter part or all of the serial number in the Search field.


Select the serial number to see more information about each FortiSwitch unit.

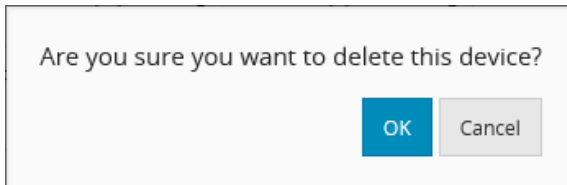
You can perform the following tasks from the Switches pane:

- Adding your FortiSwitch units to FortiSwitch Cloud on page 12
- Removing a FortiSwitch unit from FortiSwitch Cloud on page 18
- Upgrading the firmware for a FortiSwitch unit on page 18
- Downloading the FortiSwitch configuration to your computer on page 18
- Saving the FortiSwitch configuration to FortiSwitch Cloud on page 19
- Applying a configuration file to a FortiSwitch unit on page 19
- Using the FortiSwitch CLI on page 20
- Using the FortiSwitch GUI on page 20

Removing a FortiSwitch unit from FortiSwitch Cloud

To remove a FortiSwitch unit from FortiSwitch Cloud:

1. Select  in the row for the FortiSwitch unit that you want to remove from FortiSwitch Cloud.




2. Select *OK* to remove the FortiSwitch unit from FortiSwitch Cloud.

Upgrading the firmware for a FortiSwitch unit

To upgrade the firmware for a FortiSwitch unit:


1. Select  in the row for the FortiSwitch unit that needs to be upgraded.



2. Select *Firmware List* or *Local Image File*.
3. Select the firmware image for the upgrade.
4. Select *Save* or  to upgrade.


Downloading the FortiSwitch configuration to your computer


To download the FortiSwitch configuration:

Select  in the row for the FortiSwitch unit of interest. The configuration is saved as a `.txt` file.

Saving the FortiSwitch configuration to FortiSwitch Cloud

To save the configuration of a FortiSwitch unit to FortiSwitch Cloud:

1. Select  in the row of the FortiSwitch unit that you want to save the configuration of.

 Save switch config to cloud Close


Comment:


Save

2. Enter a description of the configuration file.
3. Select **Save**.
Configuration files are listed in *Configuration > Config Backup/Restore*.

Applying a configuration file to a FortiSwitch unit


To apply a configuration file that has been saved to your computer to a FortiSwitch unit:

1. Select  in the row of the FortiSwitch unit that needs the configuration restored.

 Apply local config file to switch Close


Choose Files

 No file chosen
Please choose your configuration file to upload.

2. Select *Choose Files*.
3. Select the configuration file to apply.
4. Select *Open*.
5. Select  to apply the configuration.


Using the FortiSwitch CLI

To use the CLI for a FortiSwitch unit:

1. Select  in the row of the FortiSwitch unit that you want to access.
2. In the CLI window, log in with your credentials for the FortiSwitch unit.

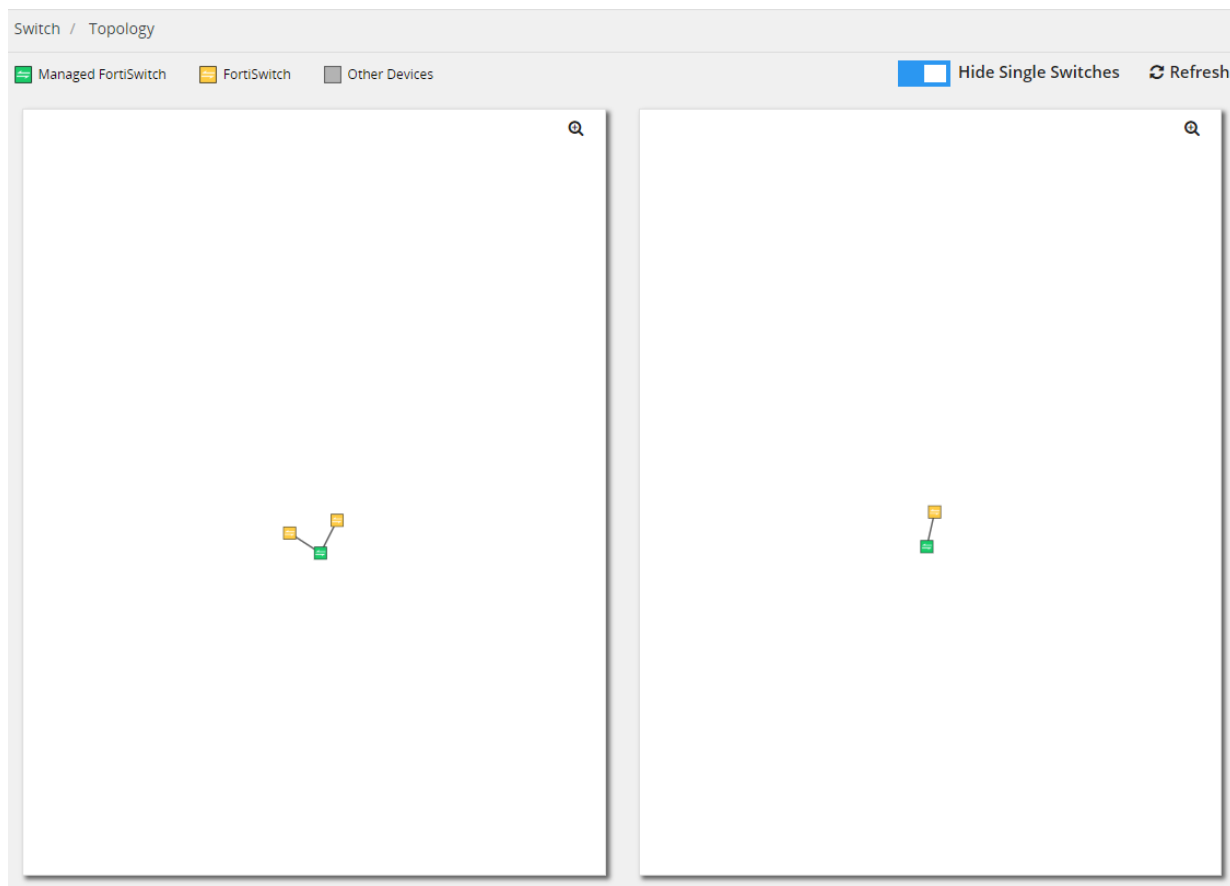
Using the FortiSwitch GUI

To use the GUI for a FortiSwitch unit:

1. Select  in the row of the FortiSwitch unit that you want to access.
2. Log in with your credentials for the FortiSwitch unit.


Topology

The Topology pane shows each managed FortiSwitch unit and which ports are connected to other devices and FortiSwitch units.



By default, only topologies containing more than one FortiSwitch unit are displayed. To display single FortiSwitch topologies, move the *Hide Single Switches* slider.

To update the topology display, select *Refresh*.

To examine the details of the topology, select .

Configuration

Select **Configuration** to configure switches and interfaces and to create, edit, add delete trunks. Use the left pane for navigation:

Zero Touch Configurations	Configuration / Zero Touch Configurations				
Configuration Backup/Restore	search... + Add ↻ Refresh				
Ports					
Interfaces					
Trunk/Link Aggregation					
	Model	Firmware	Initial Configuration	Status	Action
	FortiSwitch-224E-POE			<input checked="" type="checkbox"/>	×
	FortiSwitch-108E			<input checked="" type="checkbox"/>	×
	FortiSwitch-1024D	FS1D24-60-0025		<input type="checkbox"/>	×
	<< 1 >>				

You can select the following options from the left pane:

- [Zero Touch Configurations](#)
- [Configuration Backup/Restore](#)
- [Ports](#)
- [Interfaces](#)
- [Trunk/Link Aggregation](#)

Zero Touch Configurations

The Zero Touch Configurations pane allows you to apply the same configuration to all FortiSwitch units of a specific model. You can have only one active zero-touch configuration per model. To see the status of active zero-touch configurations, see *Monitor > Zero Touch Config Status*.

Configuration / Zero Touch Configurations

search...

+ Add ↺ Refresh

Model	Firmware	Initial Configuration	Status	Action
FortiSwitch-108E			<div><div></div></div>	<div><div>×</div><div></div></div>

<<

1

>>

To find a specific model or firmware image, enter part or all of the model number or firmware name in the Search field.

To update the list of zero-touch configurations, select **Refresh**.

You can perform the following tasks from the Zero Touch Configurations pane:

- [Creating a zero-touch configuration on page 23](#)
- [Running a zero-touch configuration on page 24](#)
- [Editing a zero-touch configuration on page 25](#)
- [Deleting a zero-touch configuration on page 26](#)

Creating a zero-touch configuration

To create a zero-touch configuration:

1. Go to *Configuration > Zero Touch Configurations*.
2. Select *Add*.

Add zero touch configurationClose

Please select the model you want to apply zero touch configuration to:

FortiSwitch-1024D

Please select the firmware you want to apply:

Please enter the initial config:

1

Please enter serial numbers to the switches excluded from zero touch configuration switch list:

Not Required. The serial numbers should be delimited by comma.

Example: S108DVT A18000354,S108DVT A18000377

Save

3. Select the FortiSwitch model that you want to configure.
4. If you want to change the firmware version, select the firmware image to apply. Only available firmware images are listed.
5. Enter the CLI commands to apply to the selected FortiSwitch model. Refer to the *FortiSwitchOS CLI Reference* for available commands.

6. If you want to exclude one or more FortiSwitch unit of the selected model, enter the serial numbers, separated by a comma.
7. Select **Save**.
The zero-touch configuration is listed on the Zero-Touch Configurations pane.


Running a zero-touch configuration

By default, a zero-touch configuration is disabled. After you enable the zero-touch configuration, the CLI commands that were entered in the Add Zero Touch Configuration dialog box are run once on all FortiSwitch units of the specified model.

To enable a zero-touch configuration, move the Status slider in the row of the zero-touch configuration that you want to run.

Editing a zero-touch configuration

To edit a zero-touch configuration:

1. Select  in the row for the zero-touch configuration that you want to edit.

Edit zero touch configuration Close

Please select the model you want to apply zero touch configuration to:

FortiSwitch-1024D ▼

Please select the firmware you want to apply:

▼

Please enter the initial config:

```
1 config system global
2     set hostname "FROMCLOUD"
3 end
```

Please enter serial numbers to the switches excluded from zero touch configuration switch list:

Not Required. The serial numbers should be delimited by comma.

Example: S108DVT A18000354,S108DVT A18000377


☐ Disable this zero touch configuration.

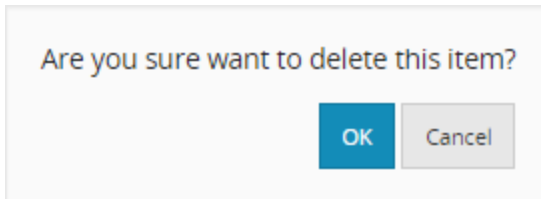
Save

2. Make your changes in the Edit Zero Touch Configuration dialog box.
3. Select **Save** to apply your changes.

Deleting a zero-touch configuration

To delete a zero-touch configuration:

1. Select  in the row of the zero-touch configuration that you want to delete.























































2. Select **OK** to delete the zero-touch configuration.

Configuration Backup/Restore

The Configuration Backup/Restore pane allows you to edit an imported configuration file and to manage saved configuration files.

Configuration / Configs

 Import
  Refresh

Time	Model	Host Name	Comment	Action
05/18/2018 20:33:46	FortiSwitch-248E-POE	AL-248EP		    
05/16/2018 20:59:17	FortiSwitch-248E-FPOE	S248EF3X17000010		    
05/15/2018 01:45:20	FortiSwitch-248D-POE	AL-248DP		    
05/15/2018 01:37:44	FortiSwitch-248E-FPOE	S248EF3X17000010		    
04/26/2018 01:04:17	FortiSwitch-548D-FPOE	S548DF4K15000064	ImportedTestConfig	    
04/26/2018 01:02:50	FortiSwitch-548D-FPOE	S548DF4K15000064	NewEditedClone	    
04/26/2018 00:42:26	FortiSwitch-548D-FPOE	S548DF4K15000064		    
04/26/2018 00:34:27	S108DV	S108DVTA18000003	TestConfig	    
04/25/2018 21:47:25	S108DV	S108DVTA18000003		    
04/03/2018 23:54:12	FortiSwitch-1048D	FS1D483Z14000097	1048d	    

<< 1 2 >>

To update the list of available configuration files, select *Refresh*.

You can perform the following tasks from the Config Backup/Restore pane:

- [Importing and editing a configuration file on page 27](#)
- [Viewing a configuration file on page 28](#)

- [Deleting a configuration file on page 30](#)
- [Downloading a configuration file to your computer on page 30](#)
- [Applying a configuration file to a FortiSwitch unit on page 30](#)

Importing and editing a configuration file

After you download the configuration file from one FortiSwitch unit, you can then import and edit it.

To import and edit a configuration file:

1. Select *Import*.

Import from local config file

Close

Please choose your local config file to upload:

Choose File

No file chosen

Please edit the config content uploaded:

1

Please select the model you want to clone to:

FortiSwitch-548D-FPOE

Please select the serial number to the device you want to clone to:

S548DF4K15000064


Comment:

Save

2. Select *Choose File*, navigate to the downloaded configuration file, and select *Open*.

3. If you want to edit the configuration file, enter your changes.
4. If you want to use the configuration file on a different FortiSwitch model, select the FortiSwitch model from the drop-down list.
5. If you want to use the configuration file on a different FortiSwitch unit, select the FortiSwitch serial number from the drop-down list.
6. Enter a description of your changes.
7. Select **Save**.
The edited configuration file is listed in the Config Backup/Restore pane.

Viewing a configuration file

To open a configuration file, select  in the row of the configuration file that you want to examine.

Cloning a configuration file

When you clone a configuration file from one FortiSwitch unit, you can then edit the clone and then apply it on a different FortiSwitch unit.

To clone a configuration file:

1. Select  in the row of the configuration file that you want to clone.

 Clone
 Close

Please select the serial number to the device you want to clone to:

Please edit the config content:

```

1 #config-version=S108DV-6.00-FW-build013-180410:opmode=0:vdom=0:user=FortiCloud
2 #conf_file_ver=2305419209815265604
3 #buildno=0013
4 #global_vdom=1
5 config system global
6   set 802.1x-ca-certificate "Entrust_802.1x_CA"
7   set 802.1x-certificate "Entrust_802.1x"
8   set admin-concurrent enable
9   set admin-https-pki-required disable
10  set admin-https-ssl-versions tlsv1-1 tlsv1-2
11  set admin-lockout-duration 60
12  set admin-lockout-threshold 3
13  set admin-port 80
14  set admin-scp disable
15  set admin-server-cert "Fortinet_Firmware"
16  set admin-sport 443
17  set admin-ssh-grace-time 120
18  set admin-ssh-port 22
19  set admin-ssh-v1 disable
20  set admin-telnet-port 23
21  set admintimeout 5
22  set alertrd-relog disable
23  set allow-subnet-overlap disable
24  set arp-timeout 180
25  set asset-tag ''
26  set auto-isl enable
27  set cfg-save automatic
28  set csr-ca-attribute enable
29  set daily-restart disable
30  set detect-ip-conflict enable
31  set dst enable
32  set gui-lines-per-page 50
33  set hostname "S108DVTA18000003"
34  set kernel-crashlog enable
35  set language english
36  set ldanconntimeout 500
37

```

Comment:

Save

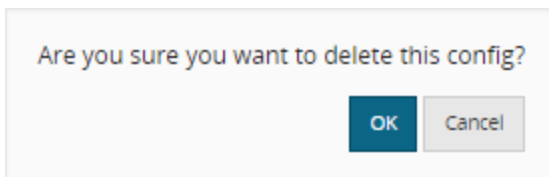
2. Select the serial number of the FortiSwitch unit that you want to use the edited configuration file on.
3. Make the changes to the configuration file.
4. Enter a description of your changes.
5. Select **Save**.

The clone is listed in the Config Backup/Restore pane.

Deleting a configuration file


To delete a configuration file:

1. Select **X** in the row of the configuration file that you want to delete.



2. Select **OK** to delete the configuration file.

Downloading a configuration file to your computer

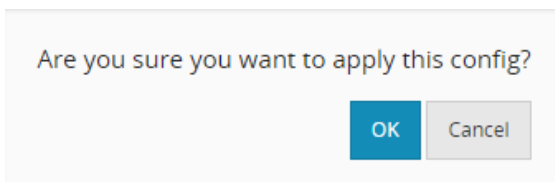
To download a configuration file from FortiSwitch Cloud to your computer, select  in the row of the configuration file that you want to download. The configuration file is saved as a `.txt` file.

Applying a configuration file to a FortiSwitch unit

You can apply a configuration file that you saved to FortiSwitch Cloud to a FortiSwitch unit.

To apply a configuration:

1. Select  in the row of the configuration that you want to apply.















2. Select **OK** to apply the configuration file to the host name in the same row as the configuration file.

Ports

The Ports pane allows you to change the administrative status and PoE status of one or more FortiSwitch ports.

Configuration / Ports

search...   Refresh

Serial Number	Port Name	Admin Status	Link Status	Speed	Speed Config	Admin POE Status	POE State	POE Power Level	Power Consumption	MTU	Flow Control	LLDP Status	LLDP Profile	Description
 S108DV3A17000013	8 Ports (1 up, 7 down)													
 S108DVTA18000001	8 Ports (8 up, down)													
 S108DVTA18000002	8 Ports (8 up, down)													
 S108DVTA18000004	8 Ports (8 up, down)													
 S108DVTA18000005	8 Ports (8 up, down)													
 S108DVTA18000006	8 Ports (8 up, down)													
 S108DVTA18000007	8 Ports (8 up, down)													
 S108DVTA18000009	8 Ports (8 up, down)													
 S108DVTA18000010	8 Ports (8 up, down)													
 S108DVTA18000011	8 Ports (8 up, down)													


<< 1 2 3 4 5 6 7 8 9 10 ... >>

To find a specific FortiSwitch unit, enter part or all of the serial number in the Search field.



To see the ports for a FortiSwitch unit, select .










To update the list of FortiSwitch units and their ports, select *Refresh*.

To configure FortiSwitch ports:


1. Select  to the left of each FortiSwitch unit that you want to configure.
2. Select the ports that you want to change.

Switch / Ports

search...   Config

Serial Number	Port Name	Admin Status	Link Status
 FS224D3Z14001026			
<input type="checkbox"/>	port1		
<input checked="" type="checkbox"/>	port2		
<input type="checkbox"/>	port3		
<input checked="" type="checkbox"/>	port4		

3. Select *Config*.

 Edit ports
 Close

Ports Checked:

Switch	Port
FS224D3Z14001026	port1
FS224D3Z14001026	port3

Admin Status

POE Status

Save

4. Select *up* or *down* in the Admin Status drop-down list.5. Select *enable* or *disable* in the POE Status drop-down list.**NOTE:** If you select ports from more than one FortiSwitch units, the POE Status drop-down list is not displayed.6. Select **Save** to apply your changes.

Interfaces

The Interfaces pane lists all interfaces for each managed FortiSwitch unit.

Configuration / Interfaces

Config
Create Trunk
Refresh


Host Name	Name	Native VLAN	Allowed VLANs	Untagged VLANs	Discard Mode
S108DV3A17000013	7 Interfaces				
S108DVTA18000001	9 Interfaces				
S108DVTA18000002	9 Interfaces				
S108DVTA18000004	9 Interfaces				
S108DVTA18000005	9 Interfaces				
S108DVTA18000006	9 Interfaces				
S108DVTA18000007	9 Interfaces				
S108DVTA18000009	9 Interfaces				
S108DVTA18000010	9 Interfaces				
S108DVTA18000011	9 Interfaces				

<< 1 2 3 4 5 6 7 8 9 10 ... >>

To update the list of FortiSwitch units and their ports, select *Refresh*.

To find a specific FortiSwitch unit, enter part or all of the host name in the Search field.

Select the host name to see more information about each FortiSwitch unit.


To see the interfaces for a FortiSwitch unit, select  by the host name of interest.

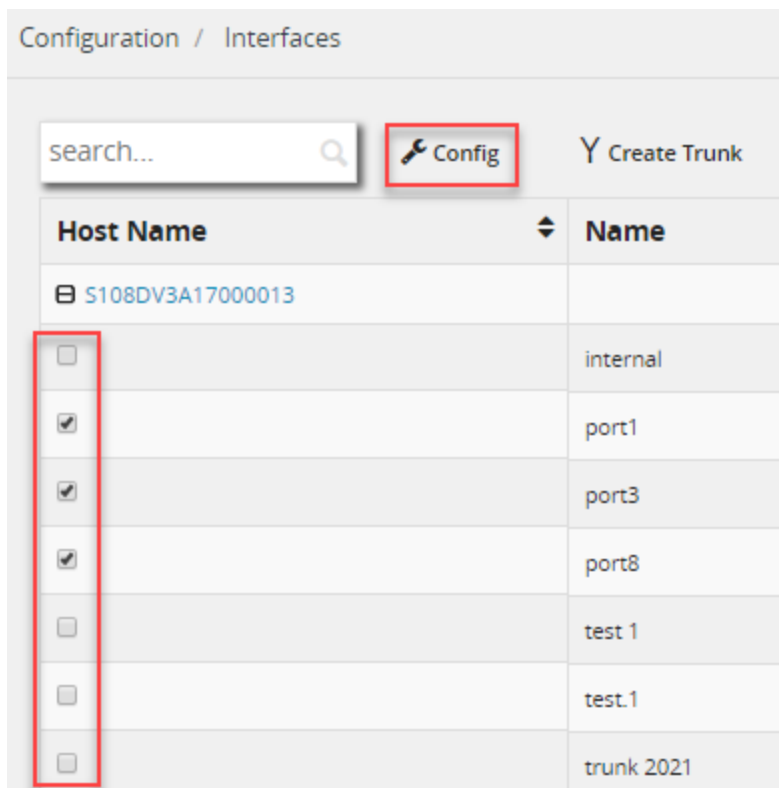
You can perform the following tasks from the Interfaces pane:

- [Configuring an interface on page 33](#)
- [Creating a trunk on page 34](#)


Configuring an interface

To configure a FortiSwitch interface:

1. Select  to the left of the FortiSwitch unit that you want to change.
2. Select the interfaces that you want to configure.



3. Select *Config*.

 Config Interface VLANs Close

Interfaces Checked:

Switch	Interface
S424DF3X16000179	port1
S424DF3X16000179	port2
S424DF3X16000179	port3

Native VLAN ID:

Set to Default

Allowed VLAN IDs:

Untagged VLAN IDs:


Save

4. Enter the VLAN identifiers for native VLANs, allowed VLANs, and untagged VLANs. Separate the identifiers with a comma.
5. Select *Save* to change the interface.

Creating a trunk

NOTE: You cannot include an internal interface or a port that is already a member of another trunk in a new trunk.

To create a trunk:

1. Select  to the left of the FortiSwitch unit that you want to add a trunk to.
2. Select the interfaces that you want to include in the trunk.

3. Select *Create Trunk*.

The screenshot shows a web-based configuration window titled "Create Trunk" with a "Close" button in the top right corner. The window contains several fields and sections:

- Trunk Interface Name:** A text input field.
- Description:** A text input field.
- Members:** A list box containing "port7" and "port8".
- Port Selection Criteria:** A dropdown menu currently showing "dst-ip".
- Mode:** A dropdown menu currently showing "static".
- McLAG:** A checkbox that is currently unchecked.

A "Save" button is located at the bottom right of the window.

4. Enter a name for the new trunk in the Trunk Interface Name field. Avoid using special characters, such as <, >, (,), #, ', and ".
5. (Optional) Add a description of the trunk in the Description field.
6. Select the port selection criteria:
 - *dst-ip*—destination IP address
 - *dst-mac*—destination MAC address
 - *src-dst-ip*—source or destination IP address
 - *src-dst-ip-xor16*—source and destination IP address
 - *src-dst-mac*—source or destination MAC address
 - *src-ip*—source IP address
 - *src-mac*—source MAC address
7. Select the mode:
 - *lacp-active*—active LACP
 - *lacp-passive*—passive LACP
 - *static*—static link aggregation
8. Select *McLAG* if you want to create an MCLAG. You cannot select both *McLAG* and *McLAG-ICL* for a trunk.

9. Select *McLAG-ICL* if you are creating an ICL for an MCLAG.
Only one MCLAG-ICL trunk can be configured for each managed FortiSwitch unit. You cannot select both *McLAG* and *McLAG-ICL* for a trunk.
10. Select *Save*.

Trunk/Link Aggregation

The Trunk/Link Aggregation pane lists all trunks that have been configured.

Configuration / Trunks

search... + Create Trunk Refresh

Name	Host Name	Description	Members	Port Selection Criteria	Mode	McLAG	McLAG-ICL	Action
temp8	SR24DN4416000049		port8	dst-ip	static			✕
test-trunk1	SR24DN4416000049		port1, port2, port3	dst-ip	static			✕
test 1	S108DV3A17000013		port2	dst-ip	static			✕
test.1	S108DV3A17000013		port5, port6	dst-ip	static			✕
trunk 2021	S108DV3A17000013		port4, port7	dst-ip	static			✕

<< 1 >>

To update the list of trunks, select *Refresh*.

To find a specific trunk, enter part or all of the name in the Search field.

You can perform the following tasks from the Trunk/Link Aggregation pane:

- [Creating a trunk on page 34](#)
- [Deleting a trunk on page 36](#)
- [Editing a trunk on page 37](#)

Deleting a trunk

To delete a trunk:

1. Select in the row of the trunk that you want to delete.


Are you sure you want to delete this trunk?

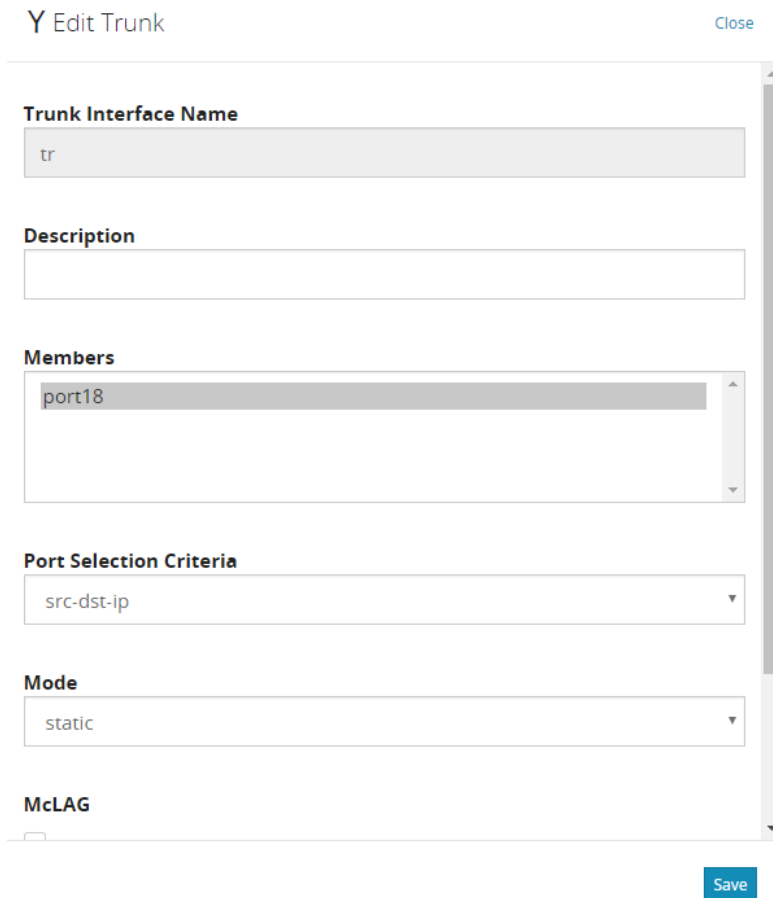
OK
Cancel

2. Select *OK* to delete the trunk.

Editing a trunk

To edit a trunk:

1. Select  in the row of the trunk to edit.



Y Edit Trunk Close

Trunk Interface Name
tr

Description

Members
port18

Port Selection Criteria
src-dst-ip

Mode
static

McLAG
☐

Save

2. (Optional) Add a description of the trunk in the Description field.
3. Select the port selection criteria:
 - *dst-ip*—destination IP address
 - *dst-mac*—destination MAC address
 - *src-dst-ip*—source or destination IP address
 - *src-dst-ip-xor16*—source and destination IP address
 - *src-dst-mac*—source or destination MAC address
 - *src-ip*—source IP address
 - *src-mac*—source MAC address
4. Select the mode:
 - *lacp-active*—active LACP
 - *lacp-passive*—passive LACP
 - *static*—static link aggregation

5. Select *McLAG* if you want to create an MCLAG.
6. Select *McLAG-ICL* if you are creating an ICL for an MCLAG.
7. Select *Save*.

Monitor

Select *Monitor* to check MAC addresses, the system log, or the audit log. Use the left pane for navigation:

Mac Address	Host Name	VLAN	Switch-Interface	Flags
90:6c:ac:97:05:6a	SR24DN4416000049	1	internal	static used
90:6c:ac:17:bf:69	AL-248DP	4094	internal	static
90:6c:ac:15:2f:9b	SR24DN4416000049	1	trunk_5	used trunk
6c:f3:7f:c6:86:2b	SR24DN4416000049	1	trunk_5	trunk
6c:f3:7f:c6:86:2a	SR24DN4416000049	1	trunk_5	trunk
08:5b:0e:ff:40:6c	SR24DN4416000049	1	trunk_5	used trunk
00:0c:29:ff:0f:cc	S108DV3A17000013	1	port1	
00:0c:29:97:28:ee	S108DV3A17000013	1	port1	

You can select the following options from the left pane:

- Mac Addresses
- System log
- Audit log
- Zero Touch Config Status

Mac Addresses

The Mac Addresses pane lists all MAC address and the corresponding host name and interface.

Mac Address	Host Name	VLAN	Switch-Interface	Flags
00:0c:29:ff:0f:cc	S108DV3A17000013	1	port1	
00:0c:29:97:28:ee	S108DV3A17000013	1	port1	
42:b3:ac:58:43:c9	S108DVTA18000098	1	internal	
90:6c:ac:17:bf:69	AL-248DP	4094	internal	static
90:6c:ac:97:05:6a	SR24DN4416000049	1	internal	static used
6c:f3:7f:c6:86:2a	SR24DN4416000049	1	trunk_5	used trunk
6c:f3:7f:c6:86:2b	SR24DN4416000049	1	trunk_5	trunk
08:5b:0e:ff:40:6c	SR24DN4416000049	1	trunk_5	used trunk
90:6c:ac:15:2f:9b	SR24DN4416000049	1	trunk_5	used trunk

To update the MAC address list, select *Refresh*.

To find a MAC address, enter part or all of the MAC address in the Search field.

System log

The System log pane lists system events for the last two weeks for all managed FortiSwitch units.

Monitor / System Log

search... Refresh

Time	Host Name	level	User	User interface	Action	Message
2018-05-22 10:49:24	S108DVTA18000240	notice	ntp_daemon			The ntp server [redacted] is determined unreachable at Tue May 22 10:49:24 2018
2018-05-22 10:49:24	S108DVTA18000010	notice	ntp_daemon			The ntp server [redacted] is determined unreachable at Tue May 22 10:49:24 2018
2018-05-22 10:49:24	S108DVTA18000010	notice	ntp_daemon			The ntp server [redacted] is determined unreachable at Tue May 22 10:49:24 2018
2018-05-22 10:49:24	S108DVTA18000006	notice	ntp_daemon			The ntp server [redacted] is determined unreachable at Tue May 22 10:49:24 2018
2018-05-22 10:49:24	S108DVTA18000006	notice	ntp_daemon			The ntp server [redacted] is determined unreachable at Tue May 22 10:49:24 2018
2018-05-22 10:49:24	S108DVTA18000562	notice	ntp_daemon			The ntp server [redacted] is determined unreachable at Tue May 22 10:49:24 2018
2018-05-22 10:49:23	S108DVTA18000513	notice	ntp_daemon			The ntp server [redacted] is determined unreachable at Tue May 22 10:49:23 2018
2018-05-22 10:49:23	S108DVTA18000513	notice	ntp_daemon			The ntp server [redacted] is determined unreachable at Tue May 22 10:49:23 2018
2018-05-22 10:49:23	S108DVTA18000229	notice	ntp_daemon			The ntp server [redacted] is determined unreachable at Tue May 22 10:49:23 2018
2018-05-22 10:49:23	S108DVTA18000245	notice	ntp_daemon			The ntp server [redacted] is determined unreachable at Tue May 22 10:49:23 2018

<< 1 2 3 4 5 6 7 8 9 10 ... >>

To update the system log, select *Refresh*.

You can use the Search field to filter by severity level or message content.

Audit log

The Audit log pane lists changes for all managed FortiSwitch units.

Monitor / Audit Log

search... Refresh

Time	User	Account	View	Role	Method	Message
2018-05-21 18:57:57	[redacted]	testuser@test.com	Trunk Detail	user	PUT	[Trunk Detail:PUT: [redacted] testuser@test.com:user] Status code: 200
2018-05-21 18:57:30	[redacted]	testuser@test.com	Trunk Detail	user	PUT	[Trunk Detail:PUT: [redacted] testuser@test.com:user] Status code: 200
2018-05-21 18:56:25	[redacted]	testuser@test.com	Trunk Detail	user	PUT	[Trunk Detail:PUT: [redacted] testuser@test.com:user] Status code: 200
2018-05-21 18:22:07	[redacted]	testuser@test.com	Trunk	admin	POST	[Trunk:POST: [redacted] testuser@test.com:admin] Status code: 201
2018-05-21 16:27:16	[redacted]	testuser@test.com	Trunk	admin	POST	[Trunk:POST: [redacted] testuser@test.com:admin] Status code: 201
2018-05-21 09:30:14	[redacted]	testuser@test.com	Trunk	admin	POST	[Trunk:POST: [redacted] testuser@test.com:admin] Status code: 201
2018-05-18 17:33:18	[redacted]	testuser@test.com	Trunk	admin	POST	[Trunk:POST: [redacted] testuser@test.com:admin] Status code: 201
2018-05-18 17:32:42	[redacted]	testuser@test.com	Trunk	admin	POST	[Trunk:POST: [redacted] testuser@test.com:admin] Status code: 201
2018-05-18 17:30:18	[redacted]	testuser@test.com	Trunk	admin	POST	[Trunk:POST: [redacted] testuser@test.com:admin] Status code: 201
2018-05-18 17:30:05	[redacted]	testuser@test.com	Trunk	admin	POST	[Trunk:POST: [redacted] testuser@test.com:admin] Status code: 201

<< 1 2 3 4 5 6 7 8 9 10 ... >>

To update the audit log, select *Refresh*.


To find which changes a specific user made, enter part or all of the user name in the Search field.


Zero Touch Config Status

The Zero Touch Config Status pane lists the status of the zero-touch configurations. The status can be

- Upgrade firmware—The firmware is being upgrade on the specified host names.
- Apply configuration command—The CLI commands entered in the Add Zero Touch Configuration dialog box are being run.
- Complete—The firmware has been upgraded, or the CLI commands have been run.
- Failure—The firmware has not been upgraded, or the CLI commands have not been run.

Monitor / Zero Touch Config Status



 Refresh

Switch	Host Name	Model	Switch Status
FS1D243Z14000063	FS1D243Z14000063	FortiSwitch-1024D	Complete
FS1D243Z14000070	FS1D243Z14000070	FortiSwitch-1024D	Complete
FS1D243Z16000013	FS1D243Z16000013	FortiSwitch-1024D	Failure

<< 1 >>

To find a specific switch or model, enter part or all of the host name or model number in the Search field.

To update the list of zero-touch configurations, select *Refresh*.

My Account

Select *My Account* to view a list of current users, add users, edit user accounts, and remove users.

search...

+ Add User

↻ Refresh

#	User	Role	Type	Action
*	testuser@test.com	admin	Forticare	
		user	LDAP	<div><div></div><div></div></div>
		admin	LDAP	<div><div></div><div></div></div>
		admin	LDAP	<div><div></div><div></div></div>
		admin	LDAP	<div><div></div><div></div></div>
		admin	LDAP	<div><div></div><div></div></div>
		admin	LDAP	<div><div></div><div></div></div>
		viewer	Forticare	<div><div></div><div></div></div>
		admin	LDAP	<div><div></div><div></div></div>
		admin	LDAP	<div><div></div><div></div></div>

<<

1

2

>>

Cloud Management License ("testuser@test.com")

Number of FortiSwitch Cloud Management Subscriptions:
700 used / 800 available / 1500 total

Contract List

Contract#	Expiry Date	Number of Subscriptions
	2018-07-28T00:00:00-07:00	1500

To update the user list, select *Refresh*.

To find a specific user, enter part or all of the user name in the Search field.

You can perform the following tasks from the My Account page:

- [Adding a user account on page 42](#)
- [Editing a user account on page 43](#)
- [Deleting a user account on page 44](#)

Adding a user account

To add a user account:

1. Select *Add User*.

 Add User Close

Type

Forticare ▼

User

Role


Viewer ▼


Save

2. Select the type of user. Select *FortiCare* if the user is accessing FortiSwitch Cloud through FortiCare or *LDAP* if the user is a Fortinet employee.
3. Type the user name for a FortiCare user or the email address for an LDAP user.
4. Select the role:
 - A *Viewer* cannot make any changes.
 - A *User* can make limited changes.
 - An *Admin* can make any change.
5. Select *Save*.

Editing a user account

To edit a user account:

1. Select  in the row of the user account that you want to edit.

 Edit User Close

Type

Forticare ▼

User

blau

Role


Admin ▼

Save

2. If you are an Admin, you can change the user role.
 - A *Viewer* cannot make any changes.
 - A *User* can make limited changes.
 - An *Admin* can make any change.
3. Select **Save**.

Deleting a user account

To delete a user account:

1. Select  in the row of the user account that you want to delete.

Are you sure you want to delete this user?

OK Cancel

2. Select **OK** to delete the user account.



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